

## **REMARKS**

The Office Action dated September 22, 2005, has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claims 1-8 are pending and respectfully submitted for consideration.

### **Double Patenting Rejection**

Claims 2 and 6-8 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of U.S. Patent No. 6,778,379 to Iwaida et al. ("the '379 patent").

The Applicants respectfully traverse the rejection. However, in order to expedite prosecution and place the application in condition for allowance, the Applicants submit herewith the attached Terminal Disclaimer.

The Applicants submit that the Terminal Disclaimer is in compliance with 37 C.F.R. § 1.321(c), and therefore, overcomes the above-noted provisional rejection of claims 2 and 6-8. The Applicants also submit that claims 2 and 6-8 recite subject matter that is neither disclosed nor suggested by the cited prior art, and therefore, is more than sufficient to render the claims non-obvious to a person of ordinary skill in the art. Accordingly, the Applicants respectfully request that the obviousness-type double patenting rejection be withdrawn.

### **Rejection Under 35 U.S.C. § 103**

Claims 1 and 3-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent Publication No. 09-293648 (JP '648). JP '648 was cited for disclosing many of the claimed elements of the invention with the exception of the claimed amounts of the binder, activated material and conductive filler. The Office

Action took the position that it would have been obvious to one having ordinary skill in the art at the time the invention was made, to find an optimum weight range of materials in the composition since it has been held that where the general conditions of a claim are disclosed, discovering the optimum or workable ranges involves only routine skill in the art. The Applicants traverse the rejection and respectfully submit that claims 1 and 3-5 recite subject matter that is neither disclosed nor suggested by JP '648.

Claim 1 recites granules for formation of an electrode of an electric double layer capacitor which are obtained by kneading and then crushing materials including an activated material, a conductive filler, and a binder at 50 to 97 mass-%, 1 to 30 mass-%, and 2 to 20 mass-%, respectively. The granules for formation of an electrode are essentially granules whose diameter is in a range of 47 to 840  $\mu\text{m}$ .

JP '648 discloses the manufacture of a polarized electrode wherein an activated carbon powder is mixed with a thermosetting resin and a solvent. The powder, the resin and the solvent are kneaded with each other. After kneading, the mixture is subjected to a drying treatment to remove the solvent and is ground to granulate into powder of a particle diameter of a prescribed size. That is, by grinding the mixture by a ball mill, or the like, the granulated powder is granulated into powder of a mean particle diameter of 420  $\mu\text{m}$  or shorter. See the English Abstract of JP '648.

As a preliminary matter, the Applicants respectfully submit that JP '648 fails to disclose a conductive filler. JP '648 merely discloses an activated carbon powder mixed with a thermosetting resin and a solvent. There is no disclosure or suggestion of the conductive filler, as recited in claim 1. As such, JP '648 fails to disclose or suggest at least the feature of a conductive filler as recited in claim 1.

With respect to claim 1, the Applicants respectfully submit that JP '648 fails to disclose or suggest other claimed features of the invention. As acknowledged in the Office Action, JP '648 does not disclose the activated material, conductive filler, and a binder at 50 to 97 mass-%, 1 to 30 mass-%, and 2 to 20 mass-%, respectively. The Office Action took the position that it would have been obvious to one having ordinary skill in the art at the time of the invention to find an optimum weight range of materials in the composition. The Applicants respectfully disagree. JP '648 provides no disclosure or suggestion of the mass-% of the disclosed activated carbon powder and thermosetting resin. Therefore, one having ordinary skill in the art would not have been motivated to optimize the compositions of the activated carbon powder and thermosetting resin in JP '648.

Further, under U.S. patent practice, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. See M.P.E.P. 2144.05.II.A. In this case, the Applicants respectfully submit that the claimed concentrations of activated material, conductive filler, and binder provide critical and non-obvious advantages over the prior art. The criticality is discussed in the specification on page 19, line 13 to page 20, line 25, which states that if the concentrations of the activated material, conductive filler and binder are outside of the claimed range, certain features of the invention cannot be obtained. Specifically, if the proportion of the activated material is smaller than the claimed range, a desired capacitance cannot be obtained. If the proportion of the activated material is larger than the claimed range, the conductivity would be too low. With respect to the conductive

filler, if the amount is smaller than the claimed range, the conductivity of a resulting electrode sheet would be too low. If the amount of conductive filler were larger than the claimed range, the capacitance would be too small. With respect to the binder, if the concentration is smaller than the claimed range, the binder function would be insufficient. If the amount of the binder were larger than the claimed range, the capacitance of a resulting capacitor would be too small.

Further, as disclosed on page 7 lines 16-24 of the specification, the claimed invention prevents a carbon fine powder or fine particles of a conductive filler from being peeled off or desorbed and then suspended in an electrolytic solution or interposed between separators. As a result, the electrode of an electric double layer capacitor can have a large voltage maintenance ratio.

The Applicants respectfully submit that JP '648 does not disclose or suggest at least the feature of activated material, conductive filler, and a binder at 50 to 97 mass-%, 1 to 30 mass-%, and 2 to 20 mass-%, respectively, nor does JP '648 provide the critical and non-obvious advantages of the present invention. As such, JP '648 fails to render claim 1 obvious.

Under U.S. patent practice, the PTO has the burden under §103 to establish a *prima facie* case of obviousness. In re Fine, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the PTO itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under §103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish obviousness. The PTO can satisfy this burden only by showing some objective

teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. Id. In order to establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (prior art could not be turned upside down without motivation to do so); In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002). The Office Action restates the advantages of the present invention to justify the modification of JP '648. There is, however, nothing JP '648 to evidence the desirability of these advantages in the disclosed structure.

In view of the above, the Applicants respectfully submit that the Office Action has failed to establish a *prima facie* case of obviousness for purposes of a rejection of claims 1 and 3-5 under 35 U.S.C. §103.

### **Conclusion**

Claims 3-5 depend from claim 1, and claims 7 and 8 depend from claim 6. The Applicants respectfully submit that each of these claims incorporates the patentable aspects thereof, and are therefore allowable for at least the same reasons as discussed above. Accordingly, the Applicants respectfully request withdrawal of the rejections, allowance of claims 1-8, and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing Attorney Dkt. No. 107355-00096.**

Respectfully submitted,



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Submission of Terminal Disclaimer